Exam Literacy: A Universal Approach to Exams

1) Breakdown the Exam Question

Command words are the words in the exam question that 'tell' students what to do in their answer (e.g. 'describe', 'explain' etc.).

- In practice papers and walking talking mock papers, command words must always be circled.
- In other exam prep resources, such as power points, command words must appear in red.

Compare the use of **diamond** with the use of **graphite explaining** each use in terms of the **bonding** and **structure**. In your answer you should use information from the diagrams above.

Topic words are the words in the exam question that refer to **the topic** students should base their answer on (e.g. biological 'adaptations', 'themes' in a novel etc.)

- In practice papers and walking talking mock papers, topic words must always be underlined.
- In other exam prep resources, such as power points, topic words must appear in **blue**.

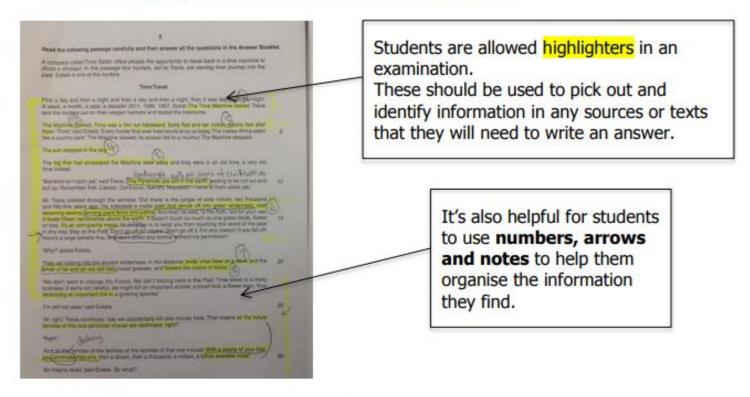
Refer to the number of **marks** given for the question.

 In practice papers, marks must always be boxed.

2) Finding Key Information from a Source or Extract

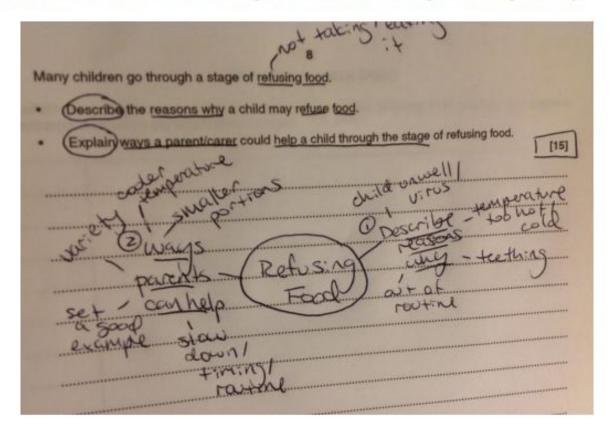
For higher-mark questions that require students to write extended responses, students should be encouraged to use strategies to **find key information**, **recall subject knowledge** and **create a plan** <u>before</u> writing out their response.

1. Finding key information in a source or text



3) Recalling Subject Knowledge by Creating a Plan

Encourage pupils to make some kind of a **plan** for an extended response **before** writing. This will help them to ensure they have recalled all of the necessary subject-specific knowledge and/or information from the text or source and organised it in a meaningful and logical way.



4) Producing a Response

Writing an answer is the final and last step in responding to an exam question. Students should be aware of and able to use a range of strategies to help them fully link their response to the question, express their ideas clearly and demonstrate subject-specific content knowledge.

1. Linking the written response to the question

In order to focus their answer clearly on the topic expressed in the exam question, students should try to **use the words from the question** to formulate **the first sentence** of their response.

Example question: Describe the reasons why a child may refuse food.

First sentence of answer:

Firstly, one reason that a child may refuse food is because they may be teething and experiencing pain or discomfort in their mouth.

5) Expressing Ideas Clearly

Students should be taught and encouraged to use **connectives** in longer written responses to exam questions in order to show a deeper and more sophisticated understanding of the information, content knowledge or ideas they are expressing.

Order/Sequencing of information/ideas:

Firstly Secondly Thirdly

In addition Next Additionally

Subsequently Finally Lastly

To begin In conclusion

Links/Relationships between information/ideas:

As a result Furthermore Nevertheless

Moreover Consequently So

For example Overall Therefore

Comparisons between information:

Similarly Likewise However

In contrast Whereas Alternatively

In the same way On the other hand

6) How to Use Revision Tools

Finally, students should learn and memorise subject-specific **vocabulary** to use in their written answers on a range of possible topics, as it encourages pupils to give more in-depth and specific responses – leading to higher marks.

Use your knowledge organisers for this!

TOPIC

How do you build an animal? Autumn 1

YEAR

Faculty:

Science

KNOWLEDGE ORGANISER

you will use during this topic.

KEYWORDS Universal Words (words I may recognise from other subjects)

Specialised: cells/tissues adapted to carry out their specific function.

Nucleus: contains DNA

Light microscope: uses light to magnify images Electron microscope: uses beams of electrons

to magnify images.

Bone marrow: site of blood cell production

within bones.

Magnification: the factor by which an object is enlarged by a microscope.

Sperm: male sex cell / gamete Muscles: contract and relax

Subject Specific Words I will use in this unit:

Cell cycle: 3 stages during which a cell divides

Differentiated: a specialised cell Ribosomes: site of protein synthesis

Mitochondria: site of respiration

Cell membrane: allows molecules to pass in and out of the cell

Cytoplasm: chemical reactions take place here Eukaryotic: cells contain a true nucleus

Mitosis: cell division that results in in genetically identical diploid cells

Embryonic stem cells: unspecialised cells which can differentiate into almost any cell type.

Therapeutic cloning: creating stem cells with the same genes as a patient, through nuclear

transfer

WHAT DO I NEED TO KNOW BEFORE STARTING?

Cells are the fundamental unit of living organisms.

The cell membrane allows movement of substances in and out of the cell, chemical reactions take place in the cytoplasm, nucleus contains the genetic material and the mitochondria is the site of respiration.

cells → tissues → organ → organ system → organism

WHAT SHOULD I KNOW/BE ABLE TO DO BY THE END OF THIS TOPIC?

A specialised cell has differentiated so it acquires different sub-sub cellular structures to carry out a specific function. Sperm need to swim to get the male DNA to the female DNA. Nerve cells send electrical impulses around the body. Muscles contract.

During the cell cycle the cell needs to grow and increase the number ... of sub-cellular structures such as ribosomes and mitochondria. The DNA replicates to form two copies of each chromosome. In mitosis one set of chromosomes is pulled to each end of the cell and the nucleus divides. Finally the cytoplasm and cell membranes divide to form two identical cells. This is important in the growth and development,

An electron microscope has much higher magnification and resolution power than a light microscope. This means that it can be used to study cells in much finer detail. This has enabled biologists to see and understand many more sub-cellular structures.

A stem cell is an undifferentiated cell which can divide into many different types of cells. Stem cells from human embryos can be cloned and made to differentiate into most different types of human cells. Stem cells from adult bone marrow can form many types of cells including blood cells. Treatment with stem cells

may be able to help conditions such as diabetes and paralysis. In therapeutic cloning an embryo is produced with the same genes as the patient.

repair and replacement of cells of multicellular organisms.

Stem cells from the embryo are not rejected by the patient's body so they may be used for medical treatment. Potential risks such as transfer of viral infection, and some people have ethical or religious objections.



